

## **REMARKS**

Claims 1, 2, 6, 7, 11-13, 16-20 and 22-24 are pending in the application. By this Amendment, Claims 1, 2, 6, 7, 11-13, 16-20 and 22-24 are amended, and Claims 3-5, 8-10, 14, 15, 21, 25 and 26 are canceled without prejudice or disclaimer of the subject matter contained therein. Favorable reconsideration is respectfully requested in light of the following Remarks.

### **I. Miscellaneous**

The Office action objects to Claims 1, 19, 25 and 26 asserting that the phrase “being used in investment decisioning” is unclear. By this Amendment, Claims 1 and 19 are amended to more clearly define that the reduced set of solutions are used in “investment decisions,” and Claims 25 and 26 are canceled, thereby rendering the objection moot with respect to these claims. Withdrawal of the objection is respectfully requested.

### **II. The Claims Satisfy the Requirement of 35 U.S.C. 112, Second Paragraph**

The Office action rejects Claims 12, 13, 15, 24 and 25 under 35 U.S.C. 112, second paragraph. The rejections are respectfully traversed.

By this Amendment, Claim 12 is amended to recite the step of repeating steps (c) – (g) for all remaining dimensions of the portfolio performance space after the dominated points are removed from the portfolio performance space. Applicant respectfully submits that amended Claim 12 satisfies the requirements of 35 U.S.C. 112, second paragraph. Withdrawal of the rejection is respectfully requested.

By this Amendment, Claim 13 is amended to further define that a coarseness of the bins is decreased as the remaining dimensions of the portfolio performance space are selected. Applicant respectfully submits that amended Claim 13 satisfies the requirements of 35 U.S.C. 112, second paragraph. Withdrawal of the rejection is

respectfully requested.

By this Amendment, Claim 24 is amended to recite wherein, after each dimension has been considered, the dominance filtering portion performing performs a final dominance check on the further final reduced set of solutions. It is respectfully submitted that amended Claim 24 satisfies the requirements of 35 U.S.C. 112, second paragraph. Withdrawal of the rejection is respectfully requested.

By this Amendment, Claims 15 and 25 are canceled, thereby rendering the rejection moot. Withdrawal of the rejection is respectfully requested.

### **III. The Claims Define Patentable Subject Matter**

1. The Office action rejects Claims 3-10 under 35 U.S.C. 101 as being directed to non-statutory subject matter. The rejection is respectfully traversed.

By this Amendment, Claim 6 is amended to define that the plurality of dimensions is n-dimensions, and the bins are in the form of n-1 dimensional polyhedra in the portfolio performance space. In addition, Claim 7 is amended to define the step of performing a final dominance check on the reduced set of solutions.

Applicant respectfully submits that amended Claims 6 and 7 clearly define statutory subject matter. Specifically, Claim 6 is functionally descriptive as to how the bins are formed in the n-dimensional portfolio performance space, and Claim 7 further includes the step of performing a final dominance check on the reduced set of solutions. Withdrawal of the rejection is respectfully requested.

By this Amendment, Claims 3-5 and 8-10 are canceled, thereby rendering the rejection moot. Withdrawal of the rejection is respectfully requested.

2. The Office action rejects Claims 1-8, 10-13, 16 and 19-26 under 35 U.S.C. 103(a) over Damschroder (U.S. Publication No. 2003/0088492, hereinafter “Damschroder”) in view of Ray et al. (U.S. Patent No. 6,018,722), hereinafter “Ray”), Claims 9 and 14 under 35 U.S.C. 103(a) over Damschroder in view of Ray, and further in view of Official Notice, and Claims 15 and 18 under U.S.C. 103(a) over Damschroder in view of Ray and further in view of Ekstrand (“Currency Markets: Equilibrium and Expectations”, Lunds Universitet, Sweden 2003, 141 pages; AAT

C813732, hereinafter “Ekstrand”). The rejections are respectfully traversed.

According to *MPEP* §2143, to establish a *prima facie* case of obviousness, three criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. *In re Linter*, 458 F.2d 1013, 173 USPQ 560, 562 (CCPA 1972). Second, there must be a reasonable expectation of success. *In re Merck & Co., Inc.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Finally, the applied reference must teach or suggest all the claim limitations. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974).

By this Amendment, Claim 1 is amended to specify, *inter alia*, the steps of:

- (c) selecting a first dimension from the at least three dimensions of the portfolio performance space;
- (d) generating bins for all remaining non-selected dimensions of the portfolio performance space;
- (e) determining a solution in each bin of the non-selected dimensions with a maximum value along the selected dimension;
- (f) comparing the solution with the maximum value in each bin to other solutions in each bin to determine whether the other solutions are dominant solutions or dominated solutions; and
- (g) removing the dominated solutions from the portfolio performance space so as to result in a reduced set of solutions, the reduced set of solutions being used in investment decisions, as recited in independent Claim 1.

Support for this novel concept of the fast dominance filter of the claimed invention can be found, for example, in Paragraphs [00171]-[00186] and Figures 10 and 11.

It is respectfully submitted that there is no mention in the applied art of at least this feature of the claimed invention. Thus, the applied art, taken singly or in combination, does not disclose, teach or suggest all the claim limitations, as recited in Claim 1.

For at least this reason, Claim 1 is allowable over the applied art, taken singly or in combination. Claims 2, 6, 7, 11-13, 16-18, which depend from Claim 1, are likewise allowable over the applied art, taken singly or in combination.

Further, it is respectfully submitted that there is no mention in the applied art of at least the feature of a dominance filtering portion that selects a first dimension from the at least three dimensions of the portfolio performance space, generates bins for all remaining non-selected dimensions of the portfolio performance space, determines a solution in each bin of the non-selected dimensions with a maximum value along the selected dimension, compares the solution with the maximum value in each bin to other solutions in each bin to determine whether the other solutions are dominant solutions or dominated solutions, and removes the dominated solutions from the portfolio performance space so as to result in a reduced set of solutions, as recited in independent Claim 19.

For at least this reason, Claim 19 is allowable over the applied art, taken singly or in combination. Claims 20 and 22-24, which depend from Claim 19, are likewise allowable over the applied art, taken singly or in combination.

#### **IV. Conclusion**

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance. Favorable consideration and prompt allowance of the application is earnestly solicited.

Should Examiner Baird believe anything further would be desirable in order to place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney at the telephone number listed below.

It is believed that any additional fees due with respect to this paper have already been identified. However, if any additional fees are required in connection with the filing of this paper, permission is given to charge account number 07-0868 in the name of General Electric Company.

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Telephone: (810) 227-9077

Respectfully submitted,

/Peter J. Rashid/

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Peter J. Rashid  
Reg. No. 39,464